

Decision **PROPOSED DECISION OF ALJ THOMAS (Mailed 10/10/2001)**

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Application of PACIFIC GAS AND ELECTRIC  
COMPANY For a Certificate of Public  
Convenience and Necessity Authorizing The  
Construction of the Northeast San Jose  
Transmission Reinforcement Project.

Application 99-09-029  
(Filed September 9, 1999)

**OPINION SUPPLEMENTING AND LIFTING STAY OF  
DECISION 01-05-059 AND APPROVING PG&E'S  
NORTHEAST SAN JOSE TRANSMISSION LINE PROJECT**

**I. Summary and Background**

This decision completes the approval process for Pacific Gas and Electric Company's (PG&E) application for a certificate of public convenience and necessity for a Northeast San Jose electric transmission line (the Project or NESJ Project). On May 17, 2001, in Decision (D.) 01-05-059, the Commission approved a transmission line route that its Environmental Impact Report (EIR) found to be the environmentally superior route, and certified the EIR. Because PG&E's cost information was not based on the chosen route, and otherwise was insufficient to set the project's cost cap,<sup>1</sup> the Commission ordered PG&E to submit updated cost

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<sup>1</sup> Pub. Util. Code § 1005.5 provides that "whenever the commission issues to an electrical . . . corporation a certificate authorizing the new construction of any addition to or extension of the corporation's plant estimated to cost greater than fifty million dollars (\$50,000,000), the commission shall specify in the certificate a maximum cost determined to be reasonable and prudent for the facility."

information reflecting the route and substation location the Commission had selected.

PG&E submitted its new information on June 18, 2001. The new cost estimate exceeded by more than \$100 million the original estimate PG&E furnished for the project. While PG&E's cost estimates for the original route, and variations on it, were in the \$77 million - \$104 million range,<sup>2</sup> the new estimate was \$182.9 million. Much of the new cost information was unexplained, and revealed substantial cost increases even for portions of the project that were – or should have been – reflected in the original estimates. Therefore, we stayed D.01-05-059 and ordered further hearings on cost.<sup>3</sup> We also allowed parties to present new evidence challenging the need for the project in view of the downturn in the Silicon Valley economy and the approval of new generation in the area.

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<sup>2</sup> PG&E presented the following cost estimates for various route configurations:

<b>PG&amp;E Cost Estimate</b>	<b>Route</b>
\$77.3 million	PG&E's original preferred route
\$83.5 million	PG&E's new preferred route (Modified I-880-A/Proposed Route)
\$84.6 million	I-880-A route
\$85.1 million	Westerly Alternative
\$87.4 million	Underground Through Business Park route
\$103 million	Northern Receiving Station route
\$104 million	I-880-B route

D.01-05-059, *mimeo.*, at 28-29.

<sup>3</sup> D.01-08-064, mailed August 27, 2001.

The hearings occurred during the period September 4-6, 2001. There was little evidence challenging the need for the project, and we find that the project is still needed to ensure reliability and meet projected load demand in the region.

We find that PG&E has failed to justify the full \$182.9 million in claimed costs. We subtract \$34,483,862 from that amount, and establish the Project's cost cap at \$148,416,138.

## II. Discussion

### A. Need

We find the Project is needed to assure electric reliability and meet projected load demand in the northeast San Jose region. The Office of Ratepayer Advocates (ORA) claimed the project no longer was needed in view of the downturn in the Silicon Valley economy and the approval of new generation in the area. Therefore, the Administrative Law Judge (ALJ) ordered both PG&E and the Independent System Operator (ISO) to examine the impact of both factors on the need for the project. PG&E presented load projections, and the ISO modified a subset of those projections to verify PG&E's forecast.

PG&E calculated projected load in three ways. First, it used its standard methodology, which relies on seven years of historical peak load data.<sup>4</sup> It also calculated loads in two additional ways based on the assumption that

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<sup>4</sup> See Exh. 26, at 14:21. PG&E submitted several of its exhibits in both confidential and redacted form. San Jose challenges the ALJ's ruling allowing PG&E to file certain cost information under seal. *Brief of [San Jose] on Issues Raised by Testimony Submitted in Hearings Held on September 4-6, 2001 in Response to the Commission's Second Scoping Memo Dated August 14, 2001 and the Opinion Staying Decision Dated August 23, 2001*, filed October 1, 2001 (San Jose 9/01 Brief), at 1 & 6 n.4. We uphold the ALJ's ruling, which allowed PG&E to file information under seal reflecting the value of individual parcels of land along the Project route – or more general information from which the parties might

*Footnote continued on next page*

there have been load reductions in the Greater San Jose area during the first eight months of 2001, which PG&E witnesses “attributed in unknown proportions, to the severe economic downturn, cool weather, conservation due to price sensitivity, and conservation in response to the energy crisis.”<sup>5</sup>

Each calculation assumed that the lower load level seen in the first eight months of 2001 would persist throughout 2001 and that load growth would then resume from that lower baseline rather than rebounding to the 2000 baseline and growing from there. The first additional scenario assumed that historic load growth would resume from the lowered baseline while the second additional scenario assumed that load growth from the lowered baseline would resume at only 50 percent of the historic level from 2002 to 2003, before resuming its historic pattern in 2004 and afterward.<sup>6</sup>

The results for each scenario were as follows:

- Seven year peak load data projection: Expected demand in summer 2002 projected at 2,415 megawatts (MW), exceeding the 2,336 MW load serving capability of the existing transmission facilities by approximately 79 MW.<sup>7</sup>

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derive parcel values. We note that all parties were allowed access to the material provided they signed a confidentiality agreement, and, in the case of landowners, limited access to outside/nontransactional counsel only. We approve this result. To allow the very parties with which PG&E will negotiate land acquisition access to PG&E’s cost estimates of their land parcels would drive up the price of the land and ultimately hurt ratepayers.

<sup>5</sup> *[PG&E’s] Opening Brief Regarding Administrative Hearings Held on September 4-6, 2001*, filed Sept. 19, 2001 (PG&E 9/01 Brief), at 11.

<sup>6</sup> *Id.*, citing Exh. 26, at 9-10.

<sup>7</sup> Exh. 26 at 16:11-15.

- Lowered baseline plus resumption of historic growth: Normal peak loads projected to exceed available electricity supply by 2003.<sup>8</sup>
- Lowered baseline plus resumption of growth at 50 percent of historic trend in 2002-03: Normal peak loads projected to exceed available electricity supply by 2004.<sup>9</sup>

Under all three scenarios, however, PG&E also projected that equipment outages would change the outcome. Even under the third, least conservative scenario, PG&E testified that “[a]ny loss of generating capacity in the Greater San Jose area (anything other than all current capacity remaining on-line at full production throughout the five-year planning horizon) during a peak load period likely would result in a shortage of electricity.”<sup>10</sup>

The ISO reviewed PG&E’s projected load growth and reached the conclusion that the transmission system in the northeast San Jose area was in violation of the ISO Grid Planning Criteria for reliability in the summers of 2000 and 2001. Under those criteria, load could not exceed 1545-1595 MW in the area (depending on whether the local peaker plant was operating); however, the 2000 load reached 1870 MW, and approached the 1886 MW limit of the system. The ISO roughly estimated a peak load in 2001 of 1750, still well above the 1595 MW maximum load figure prescribed by the ISO Grid Planning Criteria.<sup>11</sup>

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<sup>8</sup> *Id.* at 21:16-17.

<sup>9</sup> *Id.* at 22:9-10.

<sup>10</sup> *Id.* at 22:10-13.

<sup>11</sup> *Reply Brief of the California [ISO] (ISO 9/01 Brief)*, filed Oct. 1, 2001, at 5.

As for future projections, the ISO used PG&E load data, but modified it to adjust downward certain assumptions PG&E had made about load growth caused by Internet “server farms” in the area served by Silicon Valley Power (SVP). Even with this downward modification attributable to the “dot-com meltdown,”<sup>12</sup> the ISO concluded that “without the Northeast San Jose Project, within two to three years, involuntary curtailments could be required at peak times.”<sup>13</sup>

The ISO also examined whether new generation in the area would lessen the need for the Project. It considered the impact of the several new power plants either approved or in the pipeline,<sup>14</sup> as well as planned plant upgrades. It concluded that, at most,

if all the proposed generation projects in the San Jose area are constructed and in service by 2002, and all available generation is in service during peak load hours, a slight delay in the Project may be possible without jeopardizing system reliability depending on forecast load.<sup>15</sup>

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<sup>12</sup> Exh. 607, at 4:6.

<sup>13</sup> ISO 9/01 Brief, at 2.

<sup>14</sup> These plants are as follows: 1) Calpine’s Gilroy peaker generation (146 MW) in the City of Gilroy; 2) Calpine’s Metcalf Energy Center (600 MW) located close to the Metcalf 500/230/115 kV Substation south of San Jose; 3) Calpine’s C\*Power Los Esteros Critical Energy Facility at the US Dataport campus in Northeast San Jose adjacent to the Los Esteros substation site (195 MW); 4) a Milpitas power plant in the City of Milpitas close to the Milpitas 115 kV substation (200 MW); and 5) Spartan I Energy Center located in South San Jose connected to the Evergreen-San Jose B 115 kV transmission line (100 MW). Exh. 607, at 6:1-9 & Table 1.

<sup>15</sup> *Id.* at 9:1-4.

While not submitting testimony, ORA cross-examined the ISO witness' testimony on load forecasts. This examination established that while the ISO reduced PG&E's forecast in the area served by SVP, it did so only by 25 percent, and did not reduce PG&E's forecast in any other manner. In addition, the ISO reduced the SVP portion of the load forecast to 599 MW, when in fact the observed loads this year for SVP have been less than 450 MW.<sup>16</sup> Aglet also pointed out that ISO's counsel characterized PG&E's load forecasts for 2001 as "very, very rough."<sup>17</sup>

The only other party that weighed in on need was Fremont, which pointed out that PG&E has offered no assurance to the Commission that it will actually build the project. Rather, PG&E contends that it must obtain reauthorization from its Board of Directors, and then approval from the Bankruptcy Court overseeing its current bankruptcy case, before proceeding with the project. If the Commission sets the cost cap too low, PG&E states that it will not construct the Project. Thus, Fremont challenges that, "Effectively, PG&E is holding the electric reliability of its customers hostage, subject to the Commission paying the ransom of approving the cost cap proposed by PG&E."<sup>18</sup>

We too are troubled by PG&E's stance, which calls into question its position on need. If, as PG&E contends, the Project is vital to ensure electric reliability, then it would be appropriate for PG&E to commit to building the Project once it is approved. If the cost cap raises concerns, PG&E always has the

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<sup>16</sup> *Id.* at 1521:16-25.

<sup>17</sup> RT Vol. 16 at 1653:26 & 1654:1-2.

<sup>18</sup> *Brief of the City of Fremont*, filed October 1, 2001, at 2.

option under Pub. Util. Code § 1005.5(b) to apply for an increase in the cost cap if its actual, reasonable expenses exceed the cap. However, PG&E puts the Commission in the untenable position of being forced to approve PG&E's cost estimates unchanged so as to ensure the lights stay on in northeast San Jose. This approach is unacceptable. We approve the Project within a particular cost cap, as we discuss below. We also order PG&E to construct the Project. If PG&E's reasonable costs for the Project exceed the cost cap, PG&E may seek an increase in the cost cap pursuant to Pub. Util. Code § 1005.5(b).

However, there is little concrete evidence undermining PG&E's and the ISO's claim of need. No party introduced evidence to establish that new generation would obviate the need for the Project. There was virtually no challenge to PG&E's load forecasts, or evidence of alternate forecasts. The record was uncontroverted that the northeast San Jose region has been out of compliance with the ISO's Grid Planning Criteria for the past two summers. We find that PG&E and the ISO adduced substantial evidence that the Project is needed, and needed now.

## **B. Cost**

PG&E has the burden of proving the reasonableness of its cost estimates. Thus, even if no party challenged a particular aspect of its estimate, that fact does not mean that PG&E's figures should be adopted. With this principle in mind, we disallow several aspects of PG&E's cost estimate on the ground PG&E did not properly justify them. PG&E claims that the cost cap for the Project along the selected route must be no less than \$182.9 million. However, we find PG&E failed to prove its entitlement to \$34,483,862 of this amount, and therefore set the cost cap at \$148,416,138.



As a preliminary matter, we take issue with PG&E's claim that Commission action has delayed this Project in any significant way.<sup>19</sup> Had PG&E's initial estimate been at all close to what PG&E's actual costs would be,<sup>20</sup> we would not have had to conduct further hearings on the cost of the Project. PG&E claims it has lost a year of time to dedicate to constructing the Project, but in fact the time the Commission has spent evaluating the new cost material, including holding the new hearing, is three months at most.<sup>21</sup> Indeed, even during the continued hearings, PG&E continued work on the Project.<sup>22</sup> Thus, PG&E's claim of Commission-caused delay lacks validity.

Furthermore, during the continued hearings, PG&E pointed for the first time to additional reasons for the delay that have nothing to do with Commission action: a need for reapproval of the Project by its Board of Directors, and for Project authorization from the Bankruptcy Court.<sup>23</sup> Moreover, PG&E filed its own application for rehearing of D.01-05-059 based on the erroneous

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<sup>19</sup> See Exh. 26 at 2:12-19 (claiming that due to delay "PG&E believes it is no longer feasible for the Project to be in-service by June 1, 2002") & 4:6-7 (noting that "PG&E's best estimate is that the Project can be in service by May 1, 2003.")

<sup>20</sup> PG&E's own witness conceded flaws in the original estimate: "[T]he June 2001 estimate, we feel, is the more accurate estimate based on the level of engineering that was done to prepare that estimate . . . . The earlier estimates . . . I believe we only had a conceptual design. We didn't really have a lot of design prepared on that." TR Vol. 14 at 1511:7-16.

<sup>21</sup> The Commission mailed the draft decision staying D.01-05-059 on July 24, 2001 and stayed the decision on August 23, 2001.

<sup>22</sup> TR Vol. 14 at 1486:7-24.

<sup>23</sup> PG&E 9/01 Brief at 36.

argument that federal law preempts Pub. Util. Code § 1005.5, which gives the Commission authority to set a cost cap on transmission projects. Thus, yet again, PG&E is responsible for much of the delay of the Project.

PG&E's position is even more troubling because it avoided having to pay for an ORA consultant to conduct an outside analysis of Project costs by understating its costs at the initial hearing of this application. Had PG&E's first cost estimate been reasonable,<sup>24</sup> in all likelihood, ORA's request to hire such a consultant would have been approved pursuant to Pub. Util. Code § 631,<sup>25</sup> and the consultant would have had ample time to review the cost estimate in depth. While the Commission's August 27, 2001 decision staying D.01-05-059 authorized the hiring of such a consultant, ORA claimed in an August 27, 2001 letter to the ALJ that "given the very short time for testimony . . . ORA has

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<sup>24</sup> We found in D.01-05-059 that the initial cost estimate was "sorely lacking in detail" and ordered that it be revised. D.01-05-059, *mimeo.*, at 4.

<sup>25</sup> Pub. Util. Code § 631 provides:

[T]he Commission shall require every electrical corporation and every gas corporation proposing to construct or modify any electric plant or gas plant at a cost in excess of one hundred million dollars (\$100,000,000) to reimburse the commission for expenses of such consultants or advisory services as the commission deems necessary for either or both of the following:

- (a) The processing of an application for certification of the plant.
- (b) The processing of an application for approval of any rate increase reflecting the inclusion of the cost of the plant in the rates of the corporation. This subdivision applies to any plant for which the costs of construction or modification are approved for inclusion in the corporation's rates on or after January 1, 1983.

determined that hiring a consultant to prepare expert witness testimony is not a viable option.”<sup>26</sup>

While we could have imposed a cost cap based on the original estimate, that estimate did not cost out the environmentally superior route we selected in D.01-05-059. At this late stage, our only option – besides reducing the cost cap to eliminate cost estimates that PG&E did not prove to be reasonable – is to conduct a reasonableness review of Project costs once the Project is completed. Therefore, we order PG&E to file an application for such a review within 6 months of final completion of the Project. We see this approach as the only remedy to deter such underestimates in the future.

The costs meriting further consideration fall into five categories.

### **1. Contingency**

PG&E’s cost estimates each contain a built in – and variable<sup>27</sup> – “contingency” percentage to account for the fact that the estimate might be too low. (PG&E’s contingency figure does not work the other way; PG&E does not subtract a percentage from its estimate to account for the fact that its estimate might be too *high*.) PG&E’s witness testified that the company uses a “subjective” process to derive the specific contingency figure for each element of the Project:

At the time we prepare any estimate on any job there’s some knowns and some unknowns. We prepare the cost estimate given the best available data that we have. Then

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<sup>26</sup> ORA’s letter appears as Appendix A hereto.

<sup>27</sup> TR Vol. 14 at 1452:22-1453:18 (contingencies ranging from 15-30 percent for underground section and 15-30 percent for 230kV overhead portion of Project).

the project manager and the engineers sit down and try to determine where they think there's the greatest uncertainty in the different cost items.

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[I]t is kind of a subjective thing, and it's very specific to the project . . . and the engineer and the project manager kind of sit down and try to identify that as best they can at the point in time and assign what they believe is an appropriate percentage, so it does vary by project.

When asked how PG&E might derive a particular contingency percentage, PG&E's witness again indicated the imprecision with which such percentages are chosen:

Q. Where does the 30 percent come from?

A. Well, it's, once again, a subjective number. If we thought that we didn't know the count of replays (sic) and it may vary, we may choose a higher percentage to account for the extra material that may be spec'd out later in the design.<sup>28</sup>

Moreover, the PG&E witnesses testified that PG&E's management, when approached to approve large projects, generally attempts to decrease the amount of the contingency percentage:

Q. Do you know when project management goes to higher management for approval, whether higher management pressures or asks or requests that the contingency percentages be lowered? Does that ever happen?

A. Yes.

Q. Often, always?

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<sup>28</sup> *Id.* at 1482:5-10.

A. PG&E management is always looking for an opportunity to drive down the cost of projects, and similar to today, they would quiz the project manager on cost components and with the hope they could drive down those costs. So it is a frequent occurrence.<sup>29</sup>

Even after PG&E management approves a project, there is pressure to reduce the contingency percentage:

But I can tell you that project managers are typically asked to release back to the company as they go through. They don't want you to carry - they wouldn't want to carry that 26 million [contingency] back on a multiyear project.<sup>30</sup>

Further, the third party bid from outside contractor Black & Veatch included a contingency of only 8.1% of the total bid.<sup>31</sup> While we find later in this decision that the Black & Veatch bid lacks probative value as to the reasonableness of PG&E's cost estimates, PG&E's reliance on Black & Veatch's estimate renders this comparison reasonable. PG&E's overall contingency percentage is 14.7%.<sup>32</sup> The 20% reduction to the contingency amount we impose in this decision is a far smaller number than is the comparison of Black & Veatch's 8.1% and PG&E's 14.7% figures, where the former is but 55% of the

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<sup>29</sup> *Id.* at 1484:26-1485:8.

<sup>30</sup> *Id.* at 1484:22-25.

<sup>31</sup> The Black & Veatch bid (Exh. 26, table 10, at 1.3) is \$92,496,143, with "unallocated additional costs" of \$7,491,609. The definition of "unallocated additional costs" -- "unknown and undefined costs that are likely to occur throughout the project" (*id.*) -- makes clear that the term is Black & Veatch's substitute for a contingency amount.  $\$7,491,609 \div \$92,496,143 = 8.099\%$ .

<sup>32</sup> PG&E's contingency amount of  $\$26,879,761 \div \$182,900,000 = 14.69\%$ .

latter. Thus, had we relied on the Black & Veatch's contingency to set PG&E's contingency, we would have lowered the contingency not by 20%, but by 45%.

Thus, the contingency percentage is a cushion PG&E uses to protect itself against cost overruns. It is not calculated with precision, but is a subjective estimate based on a conversation between PG&E's project manager and its engineers. It is a figure that PG&E management questions closely with an aim toward reductions. Even once PG&E management approves a project, there is an attempt to have the project manager release contingency funds back to the company. The Black & Veatch contingency amount is far lower than PG&E's estimate. Based on all of this information, we find that PG&E's contingency factor is excessive and encourages PG&E to be careless about cost containment. We reduce PG&E's \$26,879,761 contingency<sup>33</sup> across the board by 20 percent. This results in a \$5,375,952 reduction of the contingency fee to \$21,503,809.

## **2. Communication Facilities**

PG&E did not justify its cost estimates or need for fiber optic communication facilities. In its original estimate, PG&E included only \$915,848 for fiber optic communication facilities.<sup>34</sup> At the second hearing, this figure had ballooned, without explanation, to \$3.8 million (exclusive of escalation and

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<sup>33</sup> *Id.* at 1454:5-7.

<sup>34</sup> Exh. C101 at page II-2(a)-20-21. This information was filed under seal. We determine that there is no basis to maintain this information as confidential, especially since PG&E's current fiber optic cost figure is in the public domain and PG&E has not maintained that it would suffer harm from release of fiber optic facility cost information.

AFUDC).<sup>35</sup> The amount of fiber to be installed varies from 24- to 96-count fiber cable. PG&E could neither explain why such a variation was necessary, nor how much of the fiber it needed for its own communications purposes. Indeed, in its comments on the proposed decision, PG&E nowhere claimed it needed 96 strand fiber cable to allow its substations to communicate with one another. While PG&E claimed it had no plans to lease excess fiber to third parties,<sup>36</sup> PG&E has sought to engage in such leases in other proceedings, of which we take official notice.<sup>37</sup> PG&E offered no reason why it could not lease lines from Pacific Bell or other carriers, noting that it does so for its own communications purposes in other contexts and that such leases are less expensive than installing its own lines.<sup>38</sup>

The significant increase in PG&E's fiber optic communications estimate, the lack of an explanation for the varied cable size, the fact that PG&E could not justify its need for such cable, and its use elsewhere of leased facilities all militate in favor of a decrease to PG&E's fiber optic communications estimate. Based on this evidence, we reduce the estimate to the figure PG&E used in its original estimate - \$915,848. This is a \$2,884,152 reduction from its current estimate of \$3.8 million.

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<sup>35</sup> Exh. 26 at 38:9-39:1. AFUDC is a calculation that takes into account PG&E's cost of capital during construction of the Project.

<sup>36</sup> TR Vol. 14 at 1476:15-21.

<sup>37</sup> See, e.g., Application (A.) 01-03-008 (*PG&E/Metromedia Fiber*); A.99-09-036/D.00-01-014 (*PG&E/Electric Lightwave, Inc.*; see also cases cited therein, *mimeo.* at 3).

<sup>38</sup> TR Vol. 14 at 1489:9-24.

### 3. Los Esteros Construction Estimate

PG&E provides little explanation for a \$6 million increase in the construction cost for the Los Esteros substation, and we disallow the increase. The Commission approved PG&E's original proposal for the Los Esteros substation without change. Nonetheless, the construction estimate for that portion of the Project increased \$6 million, from approximately \$10 million in the original estimate to \$16,022,642<sup>39</sup> in the updated estimate. PG&E's only explanation for this change was that it had "noted additional construction costs arising from building foundations in soils with a high liquefaction potential" <sup>40</sup> such as those at the Los Esteros site. However, PG&E was always aware of the potential for liquefaction at the site, and could provide no explanation for the increase:

Q. I know that our geologist was aware of potential problems in the area of Coyote Creek.

His main concern was that we locate at least 1,000 feet from Coyote Creek to avoid potential probes with liquefaction.

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Q. And at least some of that increase is attributable to what you say you know about the expense of building in liquefiable areas.

I'm assuming that . . . PG&E has always known of this extra expense in areas of liquefaction potential.

Is that correct to assume?

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<sup>39</sup> Exh. 26 at 39:5 & tab 5.

<sup>40</sup> *Comments of PG&E on August 8, 2001 Draft Opinion Staying Decision 01-05-059*, filed August 20, 2001, at 8.



A. Extra expense or risk, that was one of our major concerns from the beginning of the project was the liquefaction risk in the vicinity of Coyote Creek.

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A. I do recall the geologist was concerned about being within a thousand feet [of Coyote Creek]. That was one of our considerations on the height of the substation.

Q. But we gave you the substation that you wanted. So why an extra 6 million?

A. I understand that some test bores have been done recently, and that -- I don't know the results of those test bores, but my only explanation is that they may have a bearing.

Q. But you don't know?

A. I don't know.<sup>41</sup>

Because PG&E acknowledged that it was always concerned of the liquefaction risk at the Los Esteros site, and failed to explain the \$6 million increase in construction costs, we disallow those costs, and the accompanying contingency percentage, in their entirety.

#### **4. Undergrounding**

The single largest area of cost increase results from the Commission's decision to require undergrounding of certain portions of the transmission line. We remain convinced that we made the correct decision in this regard. PG&E's proposed transmission line will lie adjacent to one of the most important bird refuge areas in the state. PG&E's original proposal put transmission lines directly in the bird flight path. Based on the conclusions of the

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<sup>41</sup> TR Vol. 14 at 1508:19-23, 1509:4-10 & 1510:24-1511:6.

EIR, we required undergrounding where it was the environmentally superior option, and we make no changes to the route.

By the same token, PG&E's undergrounding estimate is excessive, and we reduce the amount PG&E may recover by \$20,223,758, from \$55,158,601 to \$34,934,843.<sup>42</sup> The Commission currently has before it another PG&E 230kV transmission line application, for the Livermore-Dublin-Pleasanton region of Northern California (the "Tri-Valley Application"), and the per-mile estimate for undergrounding in that proceeding is \$6,281,829.<sup>43</sup> (Because that figure does not account for the cost of "transition structures" or "risers" to transition overhead lines to underground, we account for that difference here.)

PG&E's \$55 million figure for the 2.8 miles of underground line in this Project results in a much higher per-mile estimate of \$20.84 million per mile.<sup>44</sup> This estimate is almost double the estimate of \$10-11 million per mile

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<sup>42</sup> The calculation is as follows:  $\$6,281,829 \times 2 = \$12,563,658/\text{mile}$ .  $\$20,840,000 - \$12,563,658/\text{mile} = \$8,276,342/\text{mile disallowance} \times 2.8 \text{ miles} = \$23,173,758$ , less \$2.94 million for risers = \$20,223,758 disallowance .

<sup>43</sup> A.99-11-025, Exhs. 16 and 17, *passim*. We take official notice of the pendency of the Tri-Valley application and the cited Exhibits. PG&E's own per-mile estimates constitute a party admission and are therefore admissible in evidence here. Moreover, Commission Rule 72 allows us to use evidence in one Commission proceeding in another proceeding without receipt of the actual exhibit from the first proceeding. The Tri-Valley application is for a project similar in size to the present one, and is not a "much smaller project" - the reason cited for PG&E's original \$10-11 million per mile estimate. PG&E 9/01 Brief at 26. If parties object to the taking of official notice, they may do so in their comments.

<sup>44</sup> PG&E 9/01 Brief at 26.

PG&E originally provided in this case.<sup>45</sup> While the higher estimate here has some basis in differences in construction techniques<sup>46</sup> and materials expense,<sup>47</sup> these factors do not explain the entirety of the increase. At most, the per-mile expense for labor and material should be double the amount in the Tri-Valley Application, or \$12.5 million per mile, with \$2.95 million added to the total to account for transition structures/risers.<sup>48</sup> Thus, we disallow approximately \$20 million of the \$55 million PG&E claims for undergrounding.<sup>49</sup>

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<sup>45</sup> *Id.* PG&E explained the increase as attributable to the fact it based the \$10-11 million per mile estimate on “PG&E’s experience with much smaller projects and did not translate well to larger projects in an urban setting.” *Id.* However, it cannot make this claim about the Tri-Valley project.

<sup>46</sup> The Tri-Valley project requires only one trench for the underground cable, while this Project requires two parallel trenches. TR Vol. 14 at 1469:7.

<sup>47</sup> The Tri-Valley project uses half the underground cable as does this Project - 6 cables versus 12. *See* TR Vol. 14 at 1469:2-13.

<sup>48</sup> *Comments of Pacific Gas and Electric Company on Administrative Law Judge Thomas’ October 10, 2001 Proposed Decision* (PG&E Comments), filed October 24, 2001, at 22.

<sup>49</sup> PG&E claims that the estimate of a third party contractor, Black & Veatch, which exceeded PG&E’s own estimate for the Project, is evidence that PG&E’s numbers are reasonable. We reject this contention out of hand. PG&E’s witness testified that the Black & Veatch estimate (Exh. 26 at 42-44 & Tab. 10) was merely an opening bid, and that PG&E was still in negotiations with Black & Veatch over price. TR Vol. 14 at 1478:4-1479:9. Thus, the Black & Veatch estimate lacks probative value of the cost of the Project, and is rejected.

## 5. Land Costs

During the hearing, landowners affected by valuation of their parcels advocated for an *increase* in PG&E's cost estimates for those parcels.<sup>50</sup> We decline to increase PG&E's land estimates. Moreover, the landowners' motivation for providing high land estimates - convincing the Commission to choose alternate routes that do not affect, or lessen the effects on, their property - casts doubt on the reliability of those estimates.

We are not prepared to deviate from the route we selected as environmentally superior in D.01-05-059. There was no evidence at the hearing that a less costly route was studied in its entirety in the EIR, and we indicated in staying D.01-05-059 that we did not intend to relitigate the environmental impacts of any of the alternatives discussed in the EIR.

If PG&E's estimates prove too low, PG&E may come in and seek an increase in the cost cap. We believe, however, that in the end, land values in the Silicon Valley will continue to decline in light of the clear evidence that the economy in the region has suffered drastic declines of late.<sup>51</sup> Thus, we make no change in PG&E's land estimates for the Project.

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<sup>50</sup> See *McCarthy 9/01 Brief, Reply of [ProLogis] to [PG&E's] Opening Brief Regarding Administrative Hearings Held on September 4-6, 2002*, filed October 1, 2001 (ProLogis 9/01 Brief).

<sup>51</sup> As we stated in D.01-05-059, economic decline is a subject of which courts often take judicial notice. D.01-05-059, *mimeo.*, at 80 n.131. Because the Commission's official notice rule provides that the Commission may take official notice of "such matters as may be judicially noticed by the State of California," the Silicon Valley economic decline is an appropriate subject of official notice in this proceeding. Commission Rule 73.

### C. Route

We uphold the Commission's earlier conclusion to select the environmentally superior route for this Project. No party introduced any evidence that a change is warranted. The ALJ properly struck from the record evidence of new proposed routes never studied in their entirety in the Commission's EIR. The scoping memo for the second phase of this proceeding made clear that such routes were beyond the scope of the hearings.

PG&E, McCarthy, Milpitas and ProLogis each attempted to persuade the Commission to change its choice of route. These parties proposed either routes the Commission had already considered and rejected based on environmental considerations, or new routes not studied in their entirety in the EIR. Such proposals were beyond the scope of the further hearings, and we reject them.

McCarthy claimed that because a route the Commission rejected for environmental reasons would cost a few million dollars less than the environmentally superior route, which crosses his land, the Commission violated CEQA by not selecting the former route. As San Jose points out,<sup>52</sup> however, CEQA does not call for rejection of a project alternative simply because it is more costly than the chosen alternative. Rather, only if the change in cost renders the chosen project infeasible is cost an issue.<sup>53</sup> Indeed, McCarthy concedes that this

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<sup>52</sup> San Jose 9/01 Brief at 8.

<sup>53</sup> *Citizens of Goleta v. Board of Supervisors*, 197 Cal. App. 3d 1167, 1181 (1988) ("The mere fact that an alternative is more expensive or less profitable is not sufficient to show that the alternative is financially infeasible"); *see also Kings County Farm Bureau v. City of Hanford*, 221 Cal. App. 3d 692, 731 (1990).

is the test: “When additional costs associated with a project alternative are sufficiently severe as to render it impractical to proceed with the project as proposed, the alternative is not feasible within the meaning of CEQA.”<sup>54</sup>

A difference of \$3.7 million in a project that will cost in excess of \$100 million is not adequate to render the project infeasible. McCarthy offered no evidence that PG&E would not proceed with the McCarthy Boulevard Alternative route due to the difference in cost between that alternative and the rejected alternative on the San Jose side of Coyote Creek. Thus, we reject McCarthy’s argument that the EIR was deficient for failing to use cost differences as a means of weighing alternatives.<sup>55</sup>

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<sup>54</sup> McCarthy 9/01 Brief at 14 (citations omitted).

<sup>55</sup> McCarthy’s disagreement with the EIR’s conclusion that the McCarthy Boulevard Alternative is the environmentally superior route is beyond the scope of the new hearing and thereby rejected. *Id.* at 15-17.

**III. Summary of Cost Disallowances**

The following table summarizes the cost disallowances in this decision:

PG&E Estimate	\$ 182,900,000
Less 7.0% of contingency	-\$ 5,375,952
Subtotal	\$ 177,524,048
Less communications disallowance	-\$ 2,884,152
Subtotal	\$ 174,639,896
Less undergrounding disallowance	-\$ 20,223,758
Subtotal	\$154,416,138
Less Los Esteros construction disallowance	-\$ 6,000,000
Total reasonable and prudent cost for Project	\$148,416,138
Total Disallowance	\$ 34,483,862

**IV. Conclusion**

We find the Project is needed to assure electric reliability and meet projected load forecasts. However, we find PG&E's \$182.9 million cost estimate is excessive, and set a cost cap of \$148,416,138 pursuant to Pub. Util. Code § 1005.5. We also order PG&E to complete the Project. We lift the stay of D.01-05-059 and finally approve PG&E's Northeast San Jose Transmission Project, subject to the conditions set forth here and in D.01-05-059.

**V. Comments on Proposed Decision**

Section 311(d) of the Pub. Util. Code provides that this decision must be served on all parties and subject to 30 days public review and comment prior to a vote of the Commission. Pursuant to Pub. Util. Code § 311(d), all parties have stipulated to reduce the comment period to 15 days. To allow the ALJ to incorporate the parties' comments and still ensure the Commission's consideration of this decision at its next scheduled meeting, this period is reduced to 14 days. Comments on this decision, including objections to the Commission's proposal to take official notice of certain facts as outlined in this decision, shall be e-mailed and hand-delivered to the assigned ALJ and all Commissioners no later than 12:00 noon on October 24, 2001. PG&E shall also submit to the ALJ the additional information called for in Section II(B)(1) by e-mail and hand delivery no later than 5 p.m. on October 20, 2001.

**A. Summary of Changes to Proposed Decision**

PG&E, ProLogis, McCarthy, Milpitas, Aglet, Calpine C\*Power, the ISO, San Jose, and Santa Clara/SVP filed comments on the proposed decision, several of which we incorporate into this decision. The key revisions we make are as follows, and all relate to the cost cap:

- We revise our decision on land values to eliminate the disallowances related to parcels estimated at 100% of fee value or which include a figure for severance damages.
- We add to the cost cap for the underground portion of the Project costs related to transition structures (\$2.95 million), since such



structures were not included in the per-mile underground costs we approved in connection with the Tri-Valley project, D.01-10-029.<sup>56</sup>

- Our allowance for PG&E's communication facilities costs should be increased. The proposed decision proposed reducing this cost estimate to \$107,700, the amount apparently related to this aspect of the project in PG&E's original estimate. In comments on the proposed decision, PG&E clarified that the original cost estimate for communications facilities was \$915,848, including indirects and overhead. For the reasons set forth in the proposed decision, we raise the cost figure allotted to the communications portion of the Project to \$915,848. This is a \$2,884,152 reduction from PG&E's \$3.8 million estimate for this aspect of the Project.

## **B. Comments Rejected**

### **1. Undergrounding**

We reject PG&E's remaining challenges to the proposed decision's conclusion on the cost cap for the undergrounded portion of the route. PG&E claims that this Project is not comparable to the Tri-Valley project because of their "varied geographical settings." However, we set the Tri-Valley cost cap based on PG&E's *proposed* project route, which is an urban route with utility conflicts under the streets and the potential for restrictions regarding construction hours, just as is the Project here.<sup>57</sup>

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<sup>56</sup> We accept PG&E's submissions intended to "meet" the information of which we take official notice in this decision.

<sup>57</sup> D.01-10-029, *mimeo.*, at 59-60 ("Once PG&E's proposed route converts to underground ... there is an extensive, preexisting, underground utility infrastructure in these streets...that will require careful excavation work and possibly significant hand excavation so that existing utilities are not damaged.... In order to avoid existing utilities, it is possible that PG&E will be required to trench to a significant depth..., which will require more extensive shoring of the trench... Because much of the

*Footnote continued on next page*

Moreover, all but approximately half a mile (out of 2.8 miles) of PG&E's proposed Tri-Valley route (on which the Commission evaluated costs) will require pavement cuts and repairing. Thus, once again, the Tri-Valley project is comparable to the Project here.<sup>58</sup>

Further, PG&E concedes that it is appropriate to derive cost figures for this Project based on costs for another transmission line. PG&E simply disagrees with the Commission's choice of a comparable project. PG&E contends the Wolf-Stelling 115 kV line is more comparable to this 230 kV project than another 230 kV project – Tri-Valley. We agree with PG&E's concept of using another project to estimate costs but simply disagree that a 115 kV project is appropriate for comparison. Indeed, PG&E presented no data to verify its claim that a 115 kV project was appropriately used as a cost basis for a 230 kV project.

Tri-Valley, by contrast, is comparable to the NESJ Project. Both projects use solid dielectric 230 kV cable. Indeed, PG&E concedes that the projects' cabling costs are equivalent, with adjustment for the fact that Tri-Valley uses half the cable because it uses only one trench, compared to NESJ's two

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underground work will take place in residential neighborhoods, it is likely that restrictions will be imposed regarding construction hours....”

<sup>58</sup> See Rebuttal Testimony of PG&E in Tri-Valley proceeding, dated February 14, 2001, Exh. A (showing route, on which D.01-10-029 costs based, mostly on or next to existing roadways); D.01-10-029, *mimeo.*, at 104-09, Section 10.6.1, “Construction Costs,” for explanation that Tri-Valley cost figures for adopted route based on PG&E's “unit cost” figures for its (mostly urban) proposed underground route).

trenches.<sup>59</sup> Both sets of cost figures are based on a mostly urban setting with similar paving, shoring, construction time, and depth of trenching constraints.<sup>60</sup>

## 2. Land Costs

We also reject McCarthy's challenges to the land valuations, but make a minor modification in the language of the decision. McCarthy and PG&E claim we cannot take official notice of the decline in the Silicon Valley economy to reach a conclusion about the direction land values will take in the future. McCarthy also claims we may not consider a general economic decline's effects on specific parcels of property.

As to McCarthy's claim that a general economic downturn does not indicate valuation of specific land parcels, we note that the case he cites for this proposition contains a qualification that undermines his position. The case, *San Luis Obispo Bay Properties, Inc. v. PG&E*, 28 Cal. App. 3d 556, 564 (1972), notes that a general trend might not affect individual parcel values, but goes on to state that, "we might conceivably take judicial notice of the existence of some of the adverse factors cited...." We have modified the proposed decision to account for this language.

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<sup>59</sup> PG&E Comments, Exh. C (declaration of Mark Schexnayder), ¶12 ("the Proposed Decision is correct that... the NESJ Project's twin duct bank used twice as much conductor as the Tri-Valley Project's single duct bank.... Thus, the estimated per mile cost of conductor in the Tri-Valley Project could simply be doubled to estimate the per mile cost of conductor in the NESJ Project.").

<sup>60</sup> We have added back amounts to PG&E's estimate to account for the transition structures/risers in this Project, as noted elsewhere in this decision. See PG&E Comments at 22.

Indeed, McCarthy conceded a significant decline in the real estate market of Silicon Valley earlier this year -- before the events of September 11, 2001 -- when he criticized D.01-05-059 for “neglect[ing] the *current* state of the market which has for some time been evidencing a significant decline, particularly among likely business park tenants experiencing substantial reductions in revenue.”<sup>61</sup>

As for Mr. McCarthy’s specific factual claims, his testimony that PG&E’s land values were too low was undercut on cross-examination. First, there was evidence that his comparable parcel for land valuation was farther from the sewage treatment plant.<sup>62</sup> Second, PG&E established that the McCarthy parcel to be used for the Project is less valuable than the parcel to which McCarthy compared it because a large area of the parcel is taken up with existing easements.<sup>63</sup> Thus, we reject McCarthy’s claim based on the record of this proceeding that his parcel of land should be valued at a higher amount than PG&E estimated.

In addition, McCarthy reiterates arguments he has made before about CEQA’s requirements respecting Project costs. We fully refuted those arguments in the proposed decision and need not do so further. We simply disagree with McCarthy that CEQA’s requirement that a lead agency consider “economic” factors in choosing an alternative requires the agency to reject a more costly

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<sup>61</sup> McCarthy Application for Rehearing of Decision 01-05-059, filed June 18, 2001, at 6:19-21 (emphasis in original).

<sup>62</sup> TR Vol. 14 at 1585:17-23 (sewage plant).

<sup>63</sup> *Id.* at 1592:5-1609:18.

alternative that is still feasible to build. Nor do we agree with McCarthy that the chosen route – which includes a portion affecting his property – has greater environmental impact than a rejected alternate. The final EIR states that the chosen McCarthy Boulevard alternate is preferable to the proposed route segment as to bird impacts, and we stand by that determination.

### **C. Other Issues**

We explained the remaining disallowances and determinations fully in the proposed decision, and make no change to them here.

### **Findings of Fact**

1. The Project is still needed to meet reliability concerns and load demand in the northeast San Jose region.
2. PG&E's contingency percentages are calculated on a subjective basis based on conversations between its project managers and engineers.
3. PG&E management frequently attempts to drive down the project manager/engineer-derived cost estimates, including the contingency percentage.
4. PG&E project managers are typically asked to release funds committed to a particular project back to the company while the project is in progress.
5. The Black & Veatch estimate includes an 8.1% contingency.
6. PG&E often leases fiber optic communications facilities from the telephone company.
7. PG&E often leases excess fiber optic cable it owns to unrelated third parties.
8. PG&E plans to install fiber optic cables ranging in size from 24 to 96 strands.
9. PG&E was aware of the potential for liquefaction at the Los Esteros site when it submitted its original cost estimate.

10. The Commission approved PG&E's original Los Esteros substation proposal without change.

11. PG&E increased its estimate for construction costs related to the Los Esteros substation from \$10 million to \$16 million based on the potential for liquefaction at the Los Esteros site.

12. PG&E's per-mile estimate for undergrounding along the Project route increased from \$10-11 million in its original estimate to \$20.84 million in its new estimate.

13. PG&E's per-mile estimate in the Tri-Valley project application is \$6,281,829, not including transition structures/risers, which are estimated to cost \$2.94 million for this Project. The Tri-Valley project involves a single trench and 6 underground cables, while this Project involves two trenches and 12 underground cables.

14. The underground aspects of the Tri-Valley project are sufficiently comparable to this Project for the Commission to use the Tri-Valley project for underground cost comparisons. The costs for the Tri-Valley project were based on an urban route with extensive, preexisting utility infrastructure, the possibility of deep trenching and shoring, likely restrictions regarding construction hours, and necessary repaving.

15. The Silicon Valley area has recently experienced economic decline.

16. The Project will experience delays having nothing to do with the Commission.

17. The difference in cost between the McCarthy Boulevard Alternative, which the Commission chose in D.01-05-059, and the alternative on the other side of Coyote Creek, was estimated at approximately \$3.7 million.

18. McCarthy's land is not comparable to the parcel he used for comparison purposes.

### **Conclusions of Law**

1. It is reasonable to reduce PG&E's claimed costs by \$34,483,862, which includes reduction of \$5,375,952 in contingency fees, a reduction of \$2,884,152 for costs of communication facilities, a reduction of \$6,000,000 for costs of the Los Esteros substation, and a reduction of \$20,223,758 for undergrounding costs.

2. The Commission should determine that the maximum reasonable and prudent cost for the Project is \$148,416,138.

3. Under Pub. Util. Code § 1005.5, PG&E may return to the Commission to seek an increase in the cost cap if the reasonable costs of the Project exceed the cost cap we impose here.

4. The Commission correctly relied on the EIR to choose the environmentally superior route for the Project.

5. The cost of alternatives studied pursuant to CEQA is not a basis to choose or reject an alternative unless such cost renders an alternative infeasible. A difference in cost between alternatives of \$3.7 million does not render the Project at hand infeasible.

6. Pursuant to Rule 72, it is reasonable to take official notice of the per-mile estimate of undergrounding in A.99-11-025.

7. PG&E has the burden of proving the reasonableness of its cost estimates.

8. This decision should be effective today to allow construction of the project to proceed expeditiously.

**O R D E R**

**IT IS ORDERED** that:

1. The Commission's stay of Decision (D.) 01-05-059 is lifted and Pacific Gas and Electric Company (PG&E) shall be bound by all orders entered therein.

2. Pursuant to Pub. Util. Code § 1005.5, the maximum cost determined to be reasonable and prudent for the Northeast San Jose Transmission Reinforcement Project (the Project) is \$148,416,138.

3. PG&E shall construct the Project in accordance with the environmentally superior route identified in the Commission's Environmental Impact Report.

4. PG&E shall construct the Project.

5. This proceeding is closed.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.